**Are scientists morally responsible for how their discoveries are used? Refer to one or more natural sciences as an area of knowledge.**

I believe scientists are morally responsible for how their discoveries are used. Though many of the discoveries have brought positive impacts to our society and has opened doors to further discoveries and possibilities, not all discoveries were positive; some have caused harm to the society, which may endanger numerous human lives.

For example, Fritz Haber, a chemist in the 19th-20th century, developed the production for the industrial synthesis of ammonia from its elements and also made it possible to use chlorine as the first poison gas. These developments and usage contributed in the prolongation of the great war thus harming many innocent civilians. His discovery was incredible and he received a Nobel prize in chemistry, yet his discovery had brought many negative impacts. I believe Haber is morally responsible for how his discoveries are used. Because of his discoveries, the war prolonged, which affected many people’s lives and unnecessary deaths. Even if he had made his discoveries, he could’ve prevented the war usage.

There may be opposing views to this idea. People may say science is the discovery of the truth and whatever truth any scientist discovers, they should not burden the moral responsibility of its usages. It is often impossible to predict all dangers of any discovery. However, if no responsibility is taken for the discoveries, the world will become a chaotic and dangerous place. If the scientist had not made his/her discoveries, the harm or danger might never had existed. So any effects of discoveries made by any scientists will have to be under the discoverer’s moral responsibility.

**Is ethics more a matter of the head or the heart?**

Ethics is the matter of the head. Ethics is based on the moral judgements made by individual people. The moral judgements of a person are reasoned through the society he grows up in, his experiences, and parents who raised him. Such decisions are not made by the heart, but rather by the head.

For example, if a person goes to the store and finds a nice apple, he will not ‘feel’ with his heart that he should not steal the apple. His moral judgement will tell him that he cannot steal the apple because his parents said that stealing is wrong and he thinks that stealing is wrong as well. Also, he knows that he will be punished for stealing the apple and because of the fear of punishment, he will refrain from stealing the apple.

People may claim that instantaneous moral judgements may often be decided by the heart. These include sympathy for the less fortunate, love for one’s own child, hatred towards one thing, or prejudice over one fact. However, most of the time, moral judgements are made rationally. Usually, when decisions are made by the heart, it is often an instantaneous one. However, when thought carefully about what is right or wrong, people use their heads to decide on the matter. Therefore, ethics is more a matter of the head than the heart.